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Roger A. Heppermann  
Marshal, O' Toole, Gerstein, Murray & Borun  
6300 Sears Tower  
233 South Wacker Drive  
Chicago, IL 60606-6402

EXAMINER

DELGADO, MICHAEL A

ART UNIT PAPER NUMBER

2144

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/761,922		CHRISTENSEN ET AL.	
	<b>Examiner</b>		<b>Art. Unit</b>	
	Michael S. A. Delgado		2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Response to Arguments***

Applicant's arguments filed 12/12/2005 have been fully considered but they are not persuasive. In response to the argument that the limitation of “creating a first unique network identification tag for a first one of the I/O networks and creating a second unique network identification tag for a second one of the I/O networks” is not taught by the prior art. Tominaga teaches about a network as in Fig 15 in which different servers are able to communicate on a network (Col 4, lines 5-15). In order to communicate within the data layer and physical layer of the OSI model, a network I/O device has to be on each of the servers. (Col 1, lines 30-40). The network I/O devices (Modem, Ethernet card, etc) are manufacture with a MAC address. At beginning of a session, the MAC address is used to create a unique IP address (network identification tag), which is available for the duration of the session (Col 3, lines 25-55) (Col 4, lines 5-15).

In response to the 103(a) rejection, the same reason as above applies.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5-8, 10-15, 24-26, 29-32, 35-42 and 59-62 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,880,000 by Tominaga et al.

In claim 1, Tominaga teaches about a method for use in a process control system having a plurality of input/output (I/O) networks (Fig 15 , I/O of RS, S1, S2, S3 and S4), the method comprising the steps of :

creating a first unique network identification tag "IP address" for a first one of the I/O networks "S3" (Col 3, lines 25-35 ) (Col 4, lines 5-15);

creating a second unique network identification tag "IP address" for a second one of the I/O networks "S4" (Col 3, lines 25-35 ) (Col 4, lines 5-15);

storing the first network identification tag in a first device communicatively coupled to the first I/O network (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

storing the second network identification tag in a second device communicatively coupled to the second I/O network (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

transmitting from the first device the first network identification tag available on the first network (Col 18, lines 25-30); (This will occur every time a sender send a message using TCP/IP) and

transmitting from the second device the second network identification tag available on the second network (Col 18, lines 25-30); (This will occur every time a sender send a message using TCP/IP).

In claim 5, Tominaga teaches about a method of claim 1, wherein the step of creating the first network identification tag for the first I/O network includes the steps of:

creating a first unique identification tag for a first device communicatively coupled to an user interface and to the first I/O network (Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25); and

using the first identification tag to create the first network identification tag (Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25).

In claim 6, Tominaga teaches about a method of claim 5, wherein the step of creating the first unique identification tag for the first device includes the step of creating the first unique identification tag for a process controller “S1” communicatively coupled to the user interface “RS” and to the first I/O network “S3” ((Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25).

In claim 7, Tominaga teaches about a method of claim 5, wherein the step of creating the first unique identification tag for the first device includes the step of creating the first unique identification tag for an I/O device communicatively coupled to the user interface and to the first network (Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25).

In claim 8, Tominaga teaches about a method of claim 5, wherein the step of creating the first unique network identification tag for the first I/O network includes the steps of:

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creating a second identification tag for a second device "S1" communicatively coupled to the first device "S3" and to the first I/O network (Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25); and

using the second identification tag to create the first network identification tag (Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25).

In claim 10, Tominaga teaches about a method of claim 1, wherein the step of storing the first network identification tag in the first device communicatively coupled to the first I/O network includes the step of storing the first network identification tag in a process controller communicatively coupled to the first I/O network (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

In claim 11, Tominaga teaches about a method of claim 1, wherein the step of storing the first network identification tag in the first device communicatively coupled to the first I/O network includes the step of storing the first network identification tag in an I/O device communicatively coupled to the first I/O network (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

In claim 12, Tominaga teaches about a method of claim 11, wherein the step of storing the first network identification tag in the I/O device communicatively coupled to the first I/O network includes the step of storing the first network identification tag in an I/O interface card communicatively coupled to the first I/O network (Col 22, lines 5-10) (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

In claim 13, Tominaga teaches about a method of claim 11 wherein the step of storing the first network identification tag in the I/O device includes the step of storing, the first network identification tag in an I/O carrier communicatively coupled to the first I/O network (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

In claim 14, Tominaga teaches about a method of claim 1 wherein the step of transmitting the first network identification tag available on the first I/O network includes the step of transmitting the first network identification tag on the first I/O network in response to a request for the first network identification tag (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address and a IP destination address when communicating with a destination address. For the duration of a session, the IP address has to be

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available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

In claim 15, Tominaga teaches about a method of claim 1, wherein the step of transmitting the first network identification tag available on the first I/O network includes the step of periodically transmitting the first network identification tag on the first I/O network (Col 19, lines 25-30).

In claim 24, Tominaga teaches about a process control system comprising:

a user interface "RS" (Fig 15 B);

one or more process controllers (S1, S2, S3 and S4) communicatively coupled to the user interface and to a plurality of I/O networks including a first I/O network and a second I/O network (Fig 15 A);

a first unit "S3" communicatively coupled to the first I/O network and adapted to store a first unique network identification tag "IP address" for the first I/O network and to make the first unique network identification tag available on the first I/O network (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server. and

a second unit "S4" communicatively coupled to the second I/O network and adapted to store a second unique network identification tag for the second I/O network and to make the



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second unique network identification tag available on the second I/O network (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

In claim 25, Tominaga teaches about a process control system of claim 24, wherein the first unit includes a routine adapted to be implemented on a processor to create the first network identification tag (Col 3, lines 25-40).

In claim 26, Tominaga teaches about a process control system of claim 24, wherein the first unit includes a routine adapted to be implemented on a processor to ascertain identification tags for each of two or more devices, wherein the two or more devices are communicatively coupled to create a communication pathway from the user interface to the first I/O network (Col 3, lines 25-40).

In claim 29, Tominaga teaches about a process control system of claim 24, wherein the first unit includes a routine adapted to be implemented on a processor to ascertain a first unique identification tag for a first device communicatively coupled to the user interface and to the first I/O network and to use the first identification tag to create the first network identification tag (Col 3, lines 25-40).

In claim 30, Tominaga teaches about a process control system of claim 29, wherein the first device comprises one of the one or more process controllers (Fig 3,26).

In claim 31, Tominaga teaches about a process control system of claim 29, wherein the first device comprises an I/O device (Col 4, lines 5-10).

In claim 32, Tominaga teaches about a process control system of claim 29, wherein the routine ascertains a second identification tag for a second device communicatively coupling the first device to the I/O network and uses the second identification tag to create the second network identification tag (Col 3, lines 25-40).

In claim 35, Tominaga teaches about a process control system of claim 24, wherein the first unit comprises a memory (Fig 3,74) and a routine adapted to be implemented on a processor within one of the one or more process controllers (Fig 3, 26, 28).

In claim 36, Tominaga teaches about a process control system of claim 24, wherein the first unit includes an I/O device communicatively coupled to the first I/O network (Col 3, lines 35-50).

In claim 37, Tominaga teaches about a process control system of claim 36, wherein the I/O device comprises an I/O interface (Col 3, lines 35-50).

In claim 38, Tominaga teaches about a process control system of claim 36, wherein the I/O device comprises an I/O carrier (Col 3, lines 35-50).

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In claim 39, Tominaga teaches about a process control system of claim 24, wherein the first unit includes a routine adapted to be implemented on a processor to make the first network identification tag available on the first I/O network in response to a request for the first network identification tag on the first I/O network (Col 3, lines 25-40).

In claim 40, Tominaga teaches about a process control system of claim 24, wherein the first unit includes a routine adapted to be implemented on a processor to make the first network identification tag available on the first I/O network on a periodic basis (Col 19, lines 25-30).

In claim 41, Tominaga teaches about a process control system of claim 24, wherein the first I/O network comprises a bus (Col 3, lines 50-55).

In claim 42, Tominaga teaches about a process control system of claim 24, wherein the first I/O network comprises a bus adapted to support multiplexed communications (Col 3, lines 50-55).

In claim 59, Tominaga teaches about a method for use in a process control system (addressing and communication system) having a plurality of input/output (I/O) networks, the method comprising the steps of (Fig 15, I/O of RS, S1, S2, S3 and S4) (Col 4, lines 5-25):

creating a plurality of unique identification tags for the plurality of I/O networks, respectively (Col 3, lines 25-35 ) (Col 4, lines 5-15); and,

sending a transmission over a selected I/O network of the plurality of I/O networks to identify a respective unique identification tag of the plurality of unique identification tags for the selected I/O network (Col 3, lines 25-35 ) (Col 4, lines 5-15).

In claim 60, Tominaga teaches about a method of claim 59, further comprising the step of storing the respective unique identification tag in a process controller “server” of the process control system, wherein the process controller is communicatively coupled to the selected I/O network to support implementation of one or more process control routines (Col 22, lines 5-10) (Col 18, lines 25-30); In a TCP/IP session the protocol requires the frame header to contain an IP source address when communicating with a destination address. For the duration of a session, the IP address has to be available to the sender. This can only be done by the sender storing its IP address after receiving it from a DHCP server.

In claim 61, Tominaga teaches about a method of claim 59, wherein the sending step comprises the step of periodically broadcasting the transmission on the selected I/O network (Col 3, lines 35-45 ).

In claim 62, Tominaga teaches about a method of claim 59, wherein the sending step comprises the step of responding to a request for the transmission to identify the respective unique identification tag (Col 3, lines 35-45).

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4, 9, 27-28, 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,880,000 by Tominaga et al in view of US Patent No. 6,532,217 by Alkhatib et al.

In claim 2, Tominaga teaches about a method of claim 1, wherein the step of creating the first unique network identification tag for the first I O network includes the steps of:

creating identification tags for two or more devices wherein the devices are communicatively coupled to create a communication pathway from a user interface “RS” to the first I/O network “S3” (Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25); and

combining the identification tags for each of the two or more devices to create the first network identification tag (Fig 15a, Fig 15b) (Col 3, line 60-Col 4, line 25). The rule that governs IP routing is well known in the art, which is evident from the Alkhatib reference (Col 4, line 10-Col 5, line 15).

In claim 3, Tominaga combined with Alkhatib, teaches about a method of claim 2, wherein the step of combining the identification tags includes the step of concatenating the identification tag for each of the two or more devices to create the first network identification tag (Tominaga Fig 15a, Fig 15b) (Tominaga Col 3, line 60-Col 4, line 25) (i.e. RS/S1/S3)

In claim 4, Tominaga combined with Alkhatib, teaches about a method of claim 2, further including the step of creating a unique identification tag for at least one of the two or more devices (Tominaga Fig 15a, Fig 15b) (Tominaga Col 3, line 60-Col 4, line 25).

In claim 9, Tominaga combined with Alkhatib, teaches about a method of claim 8, wherein the step of creating the first network identification tag for the first I/O network includes the step of concatenating the first identification tag and the second identification tag to create the first network identification tag (Tominaga Fig 15a, Fig 15b) (Tominaga Col 3, line 60-Col 4, line 25).

In claim 27, a process control system of claim 26, wherein the routine combines the identification tags for each of the two or more devices to create the first network identification tag (covered in claim 2 ).

In claim 28, Tominaga teaches about a process control system of claim 27, wherein the routine concatenates the identification tags for each of the two or more devices to create the first network identification tag (covered in claim 3).

In claim 33, Tominaga teaches about a process control system of claim 32. wherein the routine combines the first identification tag and the second identification tag to create the first network identification tag (covered in claim 2 ).

In claim 34, Tominaga teaches about a process control system of claim 33, wherein the routine concatenates the first identification tag and the second identification tag to create the first network identification tag (covered in claim 3 ).

Claims 16-23 and 43-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,880,000 by Tominaga et al in view of US Patent No. 6,044,401 by Harvey.

In claim 16, Tominaga teaches all the limitation but does not explicitly teach about a method of claim 1, further including the steps of using a diagnostic tool.

Harvey teaches about communicatively coupling a diagnostics tool “sniffer” and the first I/O network (Col 1, lines 40-65); and

accessing the first network identification tag via the diagnostic tool (Col 1, lines 55-65).

It is well known in the art for diagnostic tool to be used in resolving network problem as disclosed by Harvey (Col 1, lines 30-35)

In claim 17, Tominaga combined with Harvey, teaches about a method of claim 16, wherein the step of accessing the first network identification tag includes the step of issuing a request for the first network identification tag on the first I/O network (Tominaga Col 13, lines 30-35).

In claim 18, Tominaga combined with Harvey, teaches about a method of claim 16, wherein the step of accessing the first network identification tag includes the step of listening for the first network identification tag on the first I/O network (Tominaga Col 13, lines 35-40).

In claim 19, Tominaga combined with Harvey, teaches about a method of claim 16, further including the step of identifying communication protocol for the first I/O network (Harvey Col 1, lines 50-55).

In claim 20, Tominaga combined with Harvey, teaches about a method of claim 16 further including the steps of:

interpreting the received first network identification tag (Harvey Col 1, lines 50-55); and  
providing an indication representative of the identity of the first I/O network on the  
diagnostic tool (Harvey Col 1, lines 50-55).

In claim 21, Tominaga combined with Harvey teaches about a method of claim 20,  
wherein the step of providing the indication representative of the identity of the first I/O network  
includes the step of displaying the first network identification tag on the diagnostic tool (Harvey  
Col 1, lines 50-55).

In claim 22, Tominaga combined with Harvey, teaches about a method of claim 20,  
wherein the step of providing the indication representative of the first I/O network includes the  
step of displaying the first I/O network within a configuration diagram (Tominaga Fig 15a).

In claim 23, Tominaga combined with Harvey, teaches about a method of claim 16,  
further including the steps of:

accepting a user provided network identifier “device name” for a selected I/O network as  
an input (Harvey Col 1, lines 40-60);

storing the user provided network identifier (Harvey Col 1, lines 40-60);

receiving the first network identification tag from the first I/O network (Harvey Col 1,  
lines 40-60);

comparing the identity of the I/O network associated with the user provided  
network identifier with the identity of the I/O network associated with the first network  
identification tag (Harvey Col 1, lines 30-35);

generating a first indication if the identity of the I/O network associated with



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the first network identification tag matches the identity of the I/O network associated with the user provided network identifier (Harvey Col 1, lines 30-35); and

generating a second indication if the identity of the I/O network associated with first network identification tag does not match the identity of the I/O network associated with the user provided network identifier (Harvey Col 1, lines 30-35).

In claim 43, Tominaga teaches about a process control system of claim 24, further including a diagnostic tool adapted to be communicatively coupled to the first I/O network and includes a routine adapted to be implemented on a processor to access the first network identification tag on the first I/O network (covered in claim 16 ).

In claim 44, Tominaga teaches about a process control system of claim 24, wherein the routine issues a request for the first network identification tag on the first I/O network (covered in claim 17 ).

In claim 45, Tominaga teaches about a process control system of claim 43, wherein the routine listens for the first network identification tag on the first I/O network (covered in claim 18 ).

In claim 46, Tominaga teaches about a process control system of claim -1. 3, wherein the routine identifies the communication protocol for the first I/O network (covered in claim 19 ).

In claim 47, Tominaga teaches about a process control system of claim 43, wherein the routine interprets the first network identification tag received on the I/O network and provides an indication identifying the first I/O network on the diagnostic tool (covered in claim 20 ).

In claim 48, Tominaga teaches about a process control system of claim 47, wherein the routine displays the first network identification tag on the diagnostic tool (covered in claim 21 ).

In claim 49, Tominaga teaches about a process control system of claim 47, wherein the routine displays the identity of the first I/O network within a configuration diagram (covered in claim 22 ).

In claim 50, a diagnostic tool for identifying a selected I/O network in a process control system having a plurality of I/O networks, wherein a device communicatively coupled to the selected I/O network is adapted to make a network identification tag for the selected I/O network available on the selected I/O network, the diagnostic tool comprising (covered in claim 1 and 16 ):

- a port adapted to be communicatively coupled to the selected I/O network (covered in claim 1 and 16 );

- a computer readable memory (covered in claim 1 and 16 );

- a processor (covered in claim 1 and 16 );

- a first routine stored on the computer readable memory and adapted to be implemented on the processor to receive the network identification tag from the selected I/O network (covered in claim 1 and 16 ); and

- a second routine stored on the computer readable memory and adapted to be implemented on the processor to identify which one of the plurality of I/O networks is the selected I/O network based on the received network identification tag (covered in claim 1 and 16 ).

In claim 51, a diagnostic tool of claim 50, wherein the first routine issues a request for the network identification tag over the selected I/O network (covered in claim 1 and 16 ).

In claim 52, a diagnostic tool of claim 50, wherein the first routine listens for the network identification tag being periodically transmitted on the selected I/O network (covered in claim 17 ).

In claim 53, a diagnostics tool of claim 50, further including a third routine stored on the computer readable memory and adapted to be implemented on the processor to identify a communication protocol used on the selected I/O network (covered in claim 19 ).

In claim 54, a diagnostics tool of claim 50, further including a third routine stored on the computer readable memory and adapted to be implemented on the processor to provide an indication representative of the identity of the selected I/O network (covered in claim 20 )

In claim 55, Tominaga teaches about a diagnostics tool of claim 54, wherein the third routine displays the received network identification tag on the diagnostic tool (covered in claim 21 ).

In claim 56, a diagnostic tool of claim 54, wherein the third routine displays the identity of the I/O network associated with the received network identification tag using a configuration diagram (covered in claim 22 ).

In claim 57, a diagnostic tool of claim 54, wherein the third routine identifies the I/O network associated with the received network identification tag using a network configuration database (covered in claim 22 ).

In claim 58, a diagnostics tool of claim 50, further including:

a third routine stored on the computer readable memory and adapted to be implemented on the processor to accept an indication of one of the plurality of I/O networks as an input (covered in claim 23 );

a fourth routine stored on the computer readable memory and adapted to be implemented on the processor to compare the identity of the I/O network associated with the network identification tag received from the selected I/O network with an identity of the I/O network associated with the indication of the one of the plurality of the I/O networks (covered in claim 23 );

a fifth routine stored on the computer readable memory and adapted to be implemented on the processor to generate a first indication if the identity of the I/O network associated with the network identification tag received from the selected I/O network matches the identity of the I/O network associated with the indication of the one of the plurality of I/O networks (covered in claim 23); and

a sixth routine stored on a computer readable memory and adapted to be implemented on the processor to generate a second indication if the identity of the I/O network associated with the network identification tag received from the selected I/O network does not match the identity of the I/O network associated with the indication of the one of the plurality of I/O networks (covered in claim 23 ).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,405,103 by Ryan et al, teaches about a computer program for controlling domestic appliances, generated tag name comprising concatenation of area and description field and item comprising address field contents.

US Patent No. 5,980,078 by Krivoshein et al, teaches about a process control system including automatic sensing and automatic configuration of devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

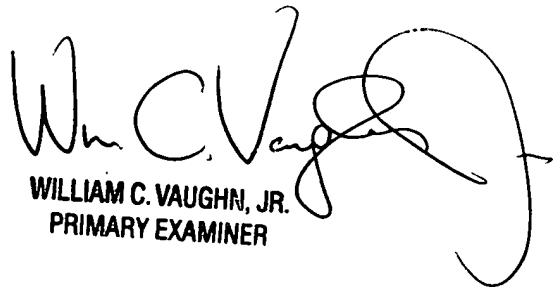
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn Jr. can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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WILLIAM C. VAUGHN, JR.  
PRIMARY EXAMINER